# Implementing Risk-based Oversight (RBO)

Experiences during a
2 year
Pilot of 10 DoD IT
Programs

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# Objective

To present risk-based oversight as an alternative process for assigning acquisition decision authority for information technology investments

A successful implementation of risk-based oversight can be expected to:

- Shorten the time-to-market
- Increase acquisition visibility to all oversight actors
- Revitalize agency software acquisition improvement efforts
- Improve the quality of the product

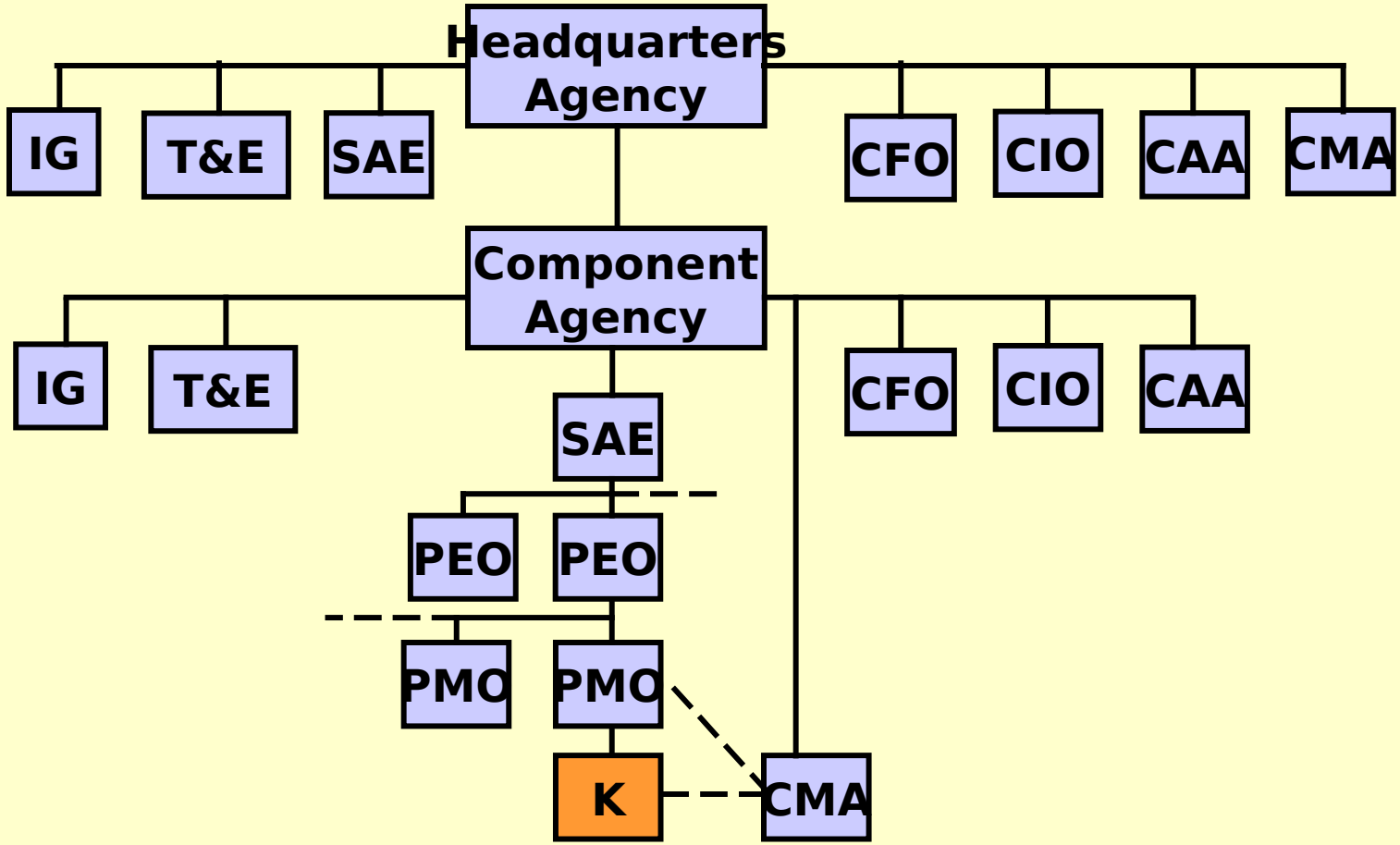
# Content of this Presentation

- Describes the motivation for Risk-based Oversight (RBO)
- Defines the essential RBO elements
- Reports on DoD RIT Pilot experience implementing RBO

# Today's IT Investment Climate

- President's agenda: ***Freedom to Manage***
- E-Gov initiatives crossing Agency lines
- Different needs in post-911 era
- Web technologies enable high tempo of service provisioning
  - Outrunning traditional acquisition processes

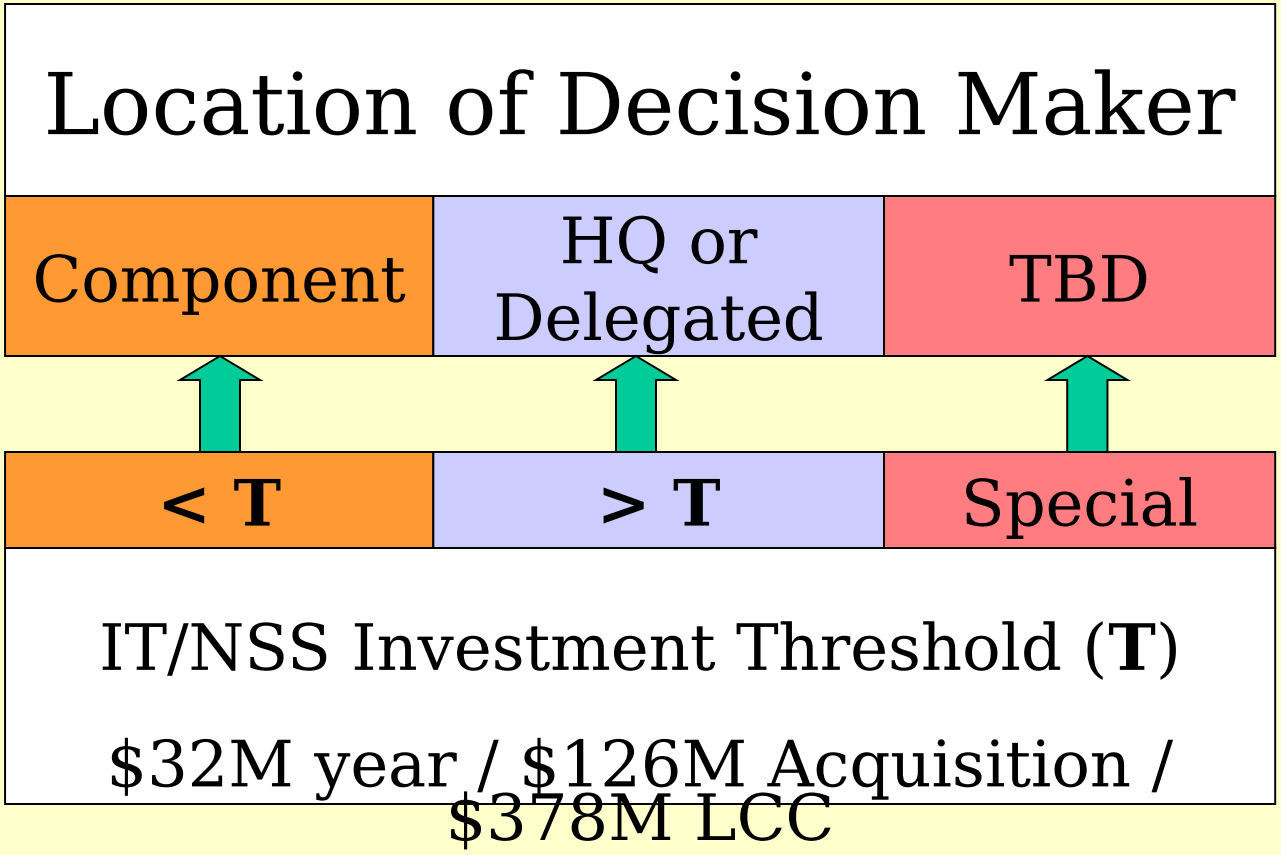
# Alignment of Agency Oversight Actors



# Agency Oversight Options

- Threshold-based Oversight
- Risk-based Oversight

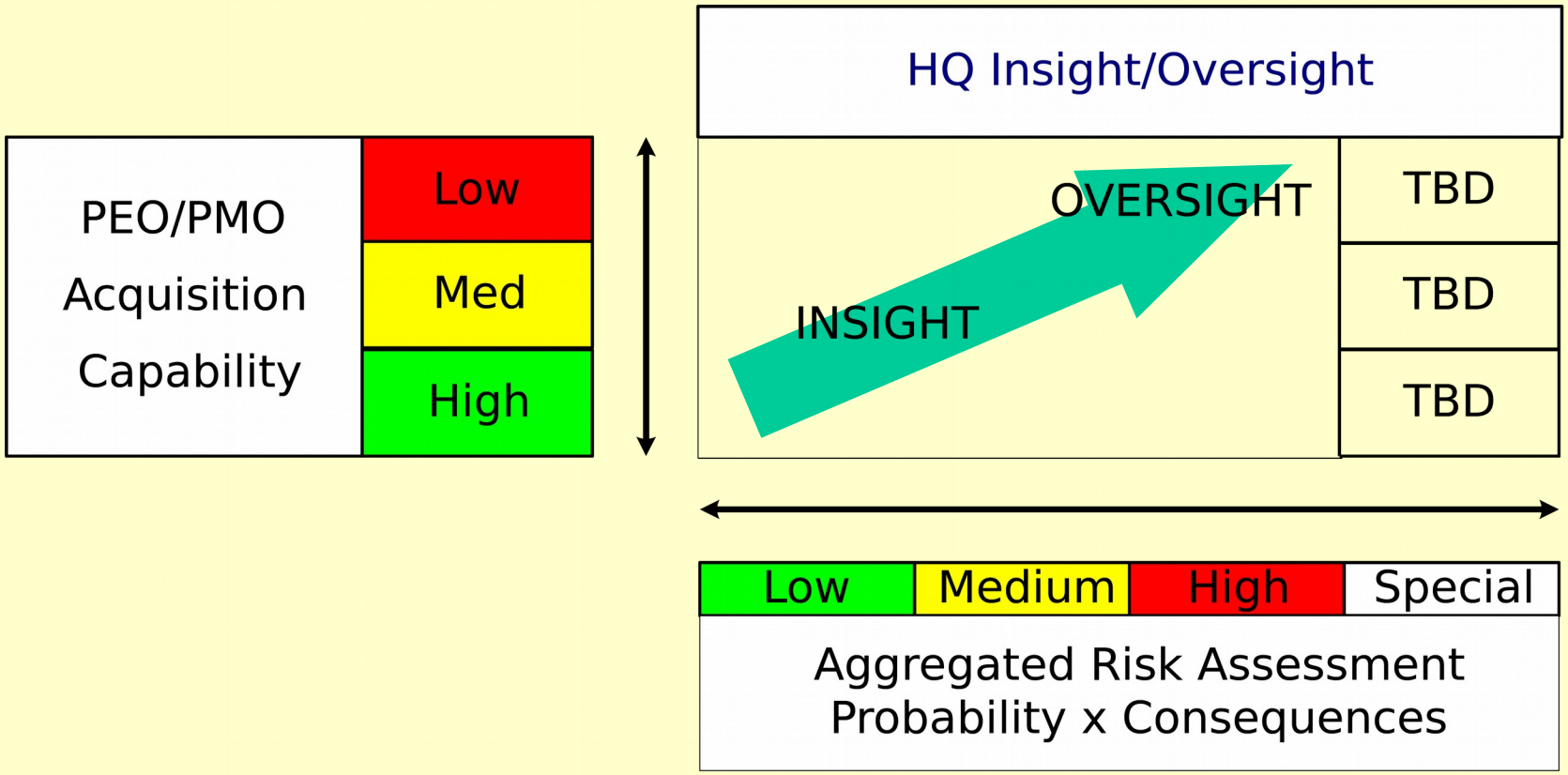
# The DoD IT $ Threshold Model



# Risk-based Oversight

- A working definition:
  - A process for determining the appropriate level of oversight and insight for an investment
  - Based on the aggregate risk of the investment and the capability of the acquiring organization to manage the risk

# The RBO Model



# Benefits of RBO

- Sets decision responsibility at the lowest appropriate level
  - Can reduce cycle time
  - Likely to improve the product
- Provides incentive for continuing increase of PEO/PMO investment capability:
  - More investments move from oversight to insight
    - Reduces the overhead of the investment
    - Frees HQ oversight assets to focus on
      - Strategic and transformational issues
      - Coaching subordinate organizations
- Strengthens institutional capabilities
- Shifts balance from checking to coaching

# Motivation to RBO

- The $ threshold criteria model lacks coverage
  - FY 02 Federal IT budget $45B
  - FY 02 DoD IT budget $24B (plus internal weapons NSS )
  - DoD has 5000+ mission critical/essential IT systems
  - DoD $ threshold based oversight visibility:
    - 40 IT Systems
    - 149 Other acquisitions containing National Security Systems
- OMB decision to review all IT investments over $1M
- RBO enablers are maturing
  - Enterprise Architecture:  OMB, DoD
  - Portfolio Management Directive
  - Adoption of network-centric operations and infrastructure
- Positive results during a 2 year RBO pilot of 10 programs

# Essential RBO Elements

1. A clear understanding of desired investment outcomes and their measure
   - Calibrates the RBO process
2. Institutionalized risk assessment and management at all levels of the agency
3. Provisions for insight into selected investment information sets by HQ
4. Process for assessing PEO/PMO capability
5. Organizational support for capability improvement
6. A trusting relationship between corresponding HQ and Component oversight actors

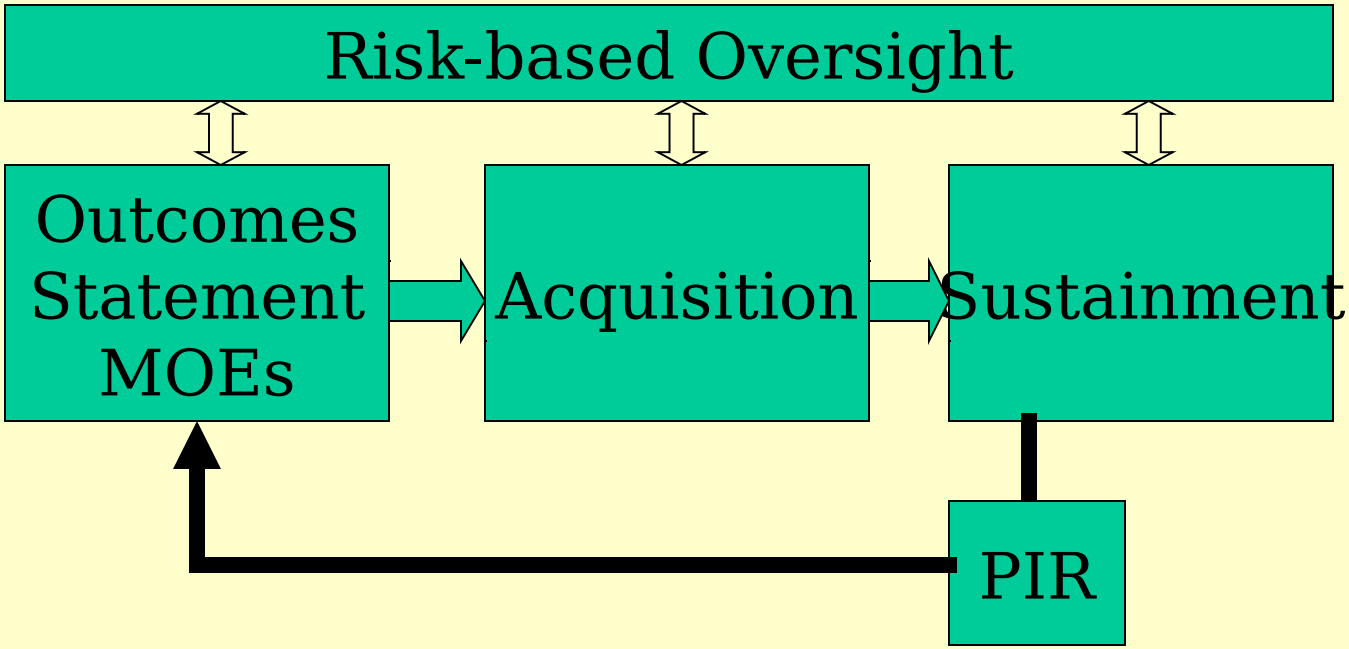
# RIT Pilot Experience

- For each of the six essential RBO elements, this section;
  - Describes the essential element
  - States the RIT Pilot Experience/Results

# 1. Clear Understanding of Outcomes

- IT investment outcomes are stated by the investment sponsor in quantitative and qualitative terms and are collectively called Measures of Effectiveness
  - In DoD the MOEs are found in the Initial Capabilities Document (ICD)
- The MOEs are measured in a Post Implementation Review to determine the extent to which the desired outcome was achieved

# 1. Calibrating the RBO



# 1. Pilot Results

- Proved to be a difficult task
- Sponsors have been writing general needs statements and passing much of the functional solution analysis to the PMO
- Investment outcomes were generally equated with system outputs
- Has required significant policy and outreach effort to effect change
- Early PIR results positive

# 2. Institutionalized Risk Management

- The Planners, Acquirers and Users communicate in a Risk oriented language
- The aggregated risk assessment includes:
  - Program requirements
  - Program resources
  - Program execution
  - Alignment with Vision
  - Program advocacy
- Risk considerations are a part of all program decisions

# 2. Pilot Results

- At start of Pilot, risk not institutionalized
  - Few PMOs with effective risk processes
  - PMO risk management plan relegated to K
  - Top 5-10 worked others dormant
  - Component oversight staffs not risk oriented
- After 2 years all 10 talk the talk and walk the walk
- Brought clarity to risk management

# 3. Insight Into Program Information

- Hypothesis:
  - Headquarters can adequately carry out their responsibilities through insight into the normal PEO/PMO work products
- Transformation from system-centric to net-centric enterprise services provides the technology and data standards to make insight feasible and available on the desktop

# 3. Pilot Experience

- Simulated the subscriber pull of investment information with two management systems:
  - The Army Acquisition Information Management (AIM) system
  - The Air Force Portal mounted System Metric and Reporting Tool (SMART)
- Enabled Portal supported decision process
- Shows promise when implemented
- Information pull requires a cultural change in oversight work flow

# 4. Assessing PEO/PMO Capability

- Strategy for assessments based on
  - Available assessor resources
  - 80% solution
  - Consider impact on PMO
- Assessment design
  - Mini-assessments of 3 days on site
  - Four person teams 3 HQ + 1 PMO for continuity
  - Six week lead time
  - PMO selected process areas to reflect acquisition needs
  - Typically 14-17 areas assessed
  - Out-brief of strengths and improvement opportunities

# 4. Quality Management System Selection

- Select a quality management system that addresses:
  - software acquisition and systems engineering
- Pilot started with SEI's SA-CMM® but found some PMOs served as integrators
- Pilot settled on the FAA-iCMM®
  - Integrates SD, SA and SE into one architecture
  - Matches up well with Contractor CMMI ®
- CMMI® Module for Acquisition released

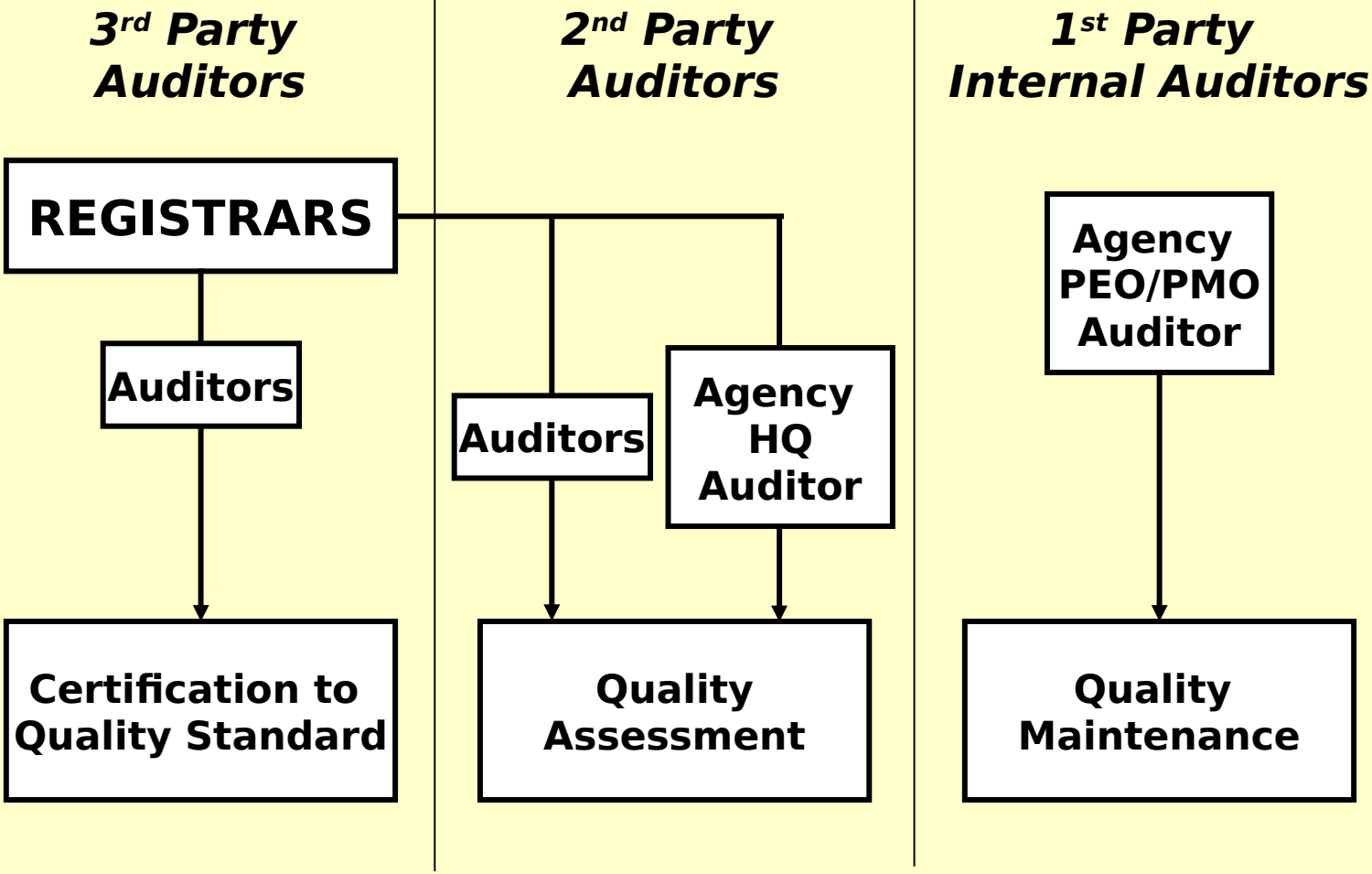
# 4. Pilot Results

- Initial assessments supported continued delegation of 6 programs, 2 did not participate and 2 are pending
- Post Pilot reviews by HQ oversight organization underway
  - Delegation confirmed for 3 PMOs reviewed
- Bonus: Mini-assessments uncovered a rich source of candidate best-practices

# 5. Organizational Support for Process Improvement

- Assessment of the situation:
  - Many Agencies require Kr to maintain quality
  - Few Agencies require quality in PEO/PMO
  - Studies show benefits of a Kr-PMO quality match
- Vital for sustaining the PMO benefits pump
- During the Pilot, Congress mandated DoD to adopt a SW Acquisition Improvement Program

# 5. Notional Quality Management System



# 5. Pilot Experience

- Found vestiges of many past efforts
- Quality programs appear to be personality driven and recede with new administrations
- GAO survey of SW Acquisition capability using SA-CMM served as stimulus
- Congressional mandate for SW Acquisition Improvement not yet visible
- RBO Pilot experience supports benefits of a Kr – PMO quality match

# 6. Trusting Relationship Between Corresponding Oversight Actors

- Essential for each pair of actors to establish trust for RBO benefits to be realized
- HQ actors must be able to operate on an exception basis
  - Each understands their roles
  - HQ actor knows the capability of the Component's oversight organization
  - HQ is confident that RBO delegation has not increased risk of the investment
- Trust but verify is the accepted standard

# 6. Pilot Experience and Summary

- HQ culture does not engender mutual trust
- Lack of trust increases the HQ workload
- Opportunity for culture change is here
  - Congressional mandate to reduce overhead of investments is reducing oversight staffs
  - Shift to strategic force capability orientation bringing about HQ portfolio management
- RBO can free HQ to manage at the portfolio level and coach the Component oversight and investment actors to win

# Questions ?